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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Robert F. Balint, et al.

Continuation of Application

No.: 09/526,106

Filed: March 15, 2000

For: BREAKPOINT FUSION

FRAGMENT COMPLEMENTATION

SYSTEM

Examiner: Epperson, Jon D.

Art Unit: 1639

INFORMATION DISCLOSURE

STATEMENT UNDER 37 CFR §1.97 and

§1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. In accordance with 37 CFR §1.98(d), copies of the references can be found in Application No. 09/526,106, filed March 15, 2000 and Application No. 09/764,163, filed January 16, 2001 (Attorney Docket Nos. 021167-000700US and 021167-000710US). It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

PATENT

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that <u>no fee is required</u> for submission of this statement. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

Kenneth E. Jenkins, Ph.D.

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Substitute for form 1449/PTO	Complete if Known		
INFORMATION DICCLOSURE	Application Number	Continuation of 09/526,106	
INFORMATION DISCLOSURE	Filing Date	March 15, 2000	
STATEMENT BY APPLICANT	First Named Inventor	Balint, Robert F.	
	Art Unit	1639	
(use as many sheets as necessary)	Examiner Name	Epperson, Jon D.	
Page 3 of 6	Attorney Docket Number	021167-000750US	

	U.S. PATENT DOCUMENTS						
		Document Number					
Examiner	Cite No. ¹	Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
	AA	US-5,585,245	12/17/1996	Johnsson, et al.			
	AB	US-6,270,964 B1	08/07/2001	Michnick, et al.			
	AC	US-6,294,330	09/25/2001	Michnick, et al.			

				FOREIGN	PATENT DOCU	MENTS		
Examiner Cite	Foreign Patent Document				Name of Patentee or	Pages, Columns, Lines, Where Relevant		
Initials*	No.1	Country Code ³	Number⁴	Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Passages or Relevant Figures Appear	Τ6
	AD	wo	95/29195	A1	11/02/1995	California Institute of Technology		
	AE	wo	96/30540	A2	10/03/1996	The Regents of the University of California		
	AF	wo	98/34120	A1	08/06/1998	Universite De Montreal		
	AG	wo	98/44350	A1	10/08/1998	The Board of Trustees of the Leland Stanford Junior University		
	AH	wo	99/28746	A1	06/10/1999	Institute Pasteur		
	Al	wo	00/07038	A3	02/10/2000	Universite De Montreal		
	AJ	wo	00/71565	A2	11/30/2000	The Regents of the University of California		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	AK	Amdt et al., "A Heterodimeric Colied-coil Peptide Pair Selected in Vivo from a Designed Library-versus-Library Ensemble", <u>J. Mol. Biol.</u> 295: 627-639 (2000).	
	AL	Bartel, et al., "A protein linkage map of Escherichia coli bacteriophage T7," Nature Genetics, 12:72 (January 12, 1996).	
	АМ	Baird et al., "Circular permutation and receptor insertion within green fluorescent proteins", Proc. Natl. Acad. Sci. USA 96: 11241-11246 (1999).	

Examiner	Date	
Signature	Considered	

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L.,	AN	Bartel, et al., "Short Technical Reports; Elimination of false positives that arise in using the two-hybrid system," Biotechniques, 14(6):920 (1993).	
	AO	Betton et al., "Creating a bifunctional protein by insertion of β-lactamase into the maltodextrin-binding protein", Nature Biotechnology 15: 1276-1279 (1997).	
	AP	Blackwood, et al., "Max: A helix-loop-helix zipper protein that forms a sequence-specific DNA-binding complex with myc," Science , 251:1211 (March 8, 1991).	
	AQ	Chien, et al., "The two-hybrid system: A method to identify and clone genes for proteins that interact with a protein of interest," Proc Natl Acad Sci, 88:9578 (1991).	
	AR	Cubitt, et al., "Understanding, improving and using green fluorescent proteins," <u>Trends Biochem</u> , 20:448 (November 1995).	
	AS	Defeo-Jones, et al., "Cloning of cDNAs for cellular proteins that bind to the retinoblastoma gene product," Nature, 352:251 (July 18, 1991).	
	AT	Fields, et al., "A novel genetic system to detect protein-protein interactions," Nature, 340:245 (July 20, 1989).	
	AU	Fromont-Racine, et al., "Toward a functional analysis of the yeast genome through exhaustive two-hybrid screens, Nature Genetics, 16:277 (July 1997).	
	AV	Johnsson, et al., "Split ubiquitin as a sensor of protein interactions in vivo," Proc Natl Acad Sci., 91:10340-10344 (October 1994).	
	AW	Karimova, et al., "A bacterial two-hybrid system based on a reconstituted signal transduction pathway," Proc Natl Acad Sci, 95:5752-5756 (May 1998).	
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	AY	Krebber, et al., "Reliable cloning of functional antibody variable domains from hybridomas and spleen cell repertoires employing a reengineered phage display system," <u>J. Immunol. Methods</u> , 201:35-55 (1997).	
	ВА	Luban, et al., "Human Immunodeficiency Virus Type 1 Gag Protein Binds to Cyclophilins A and B", Cell, 73:1067-1078 (1993).	
	88	Michnick et al., "Detection of Protein-Protein Interactions by Protein Fragment Complementation Strategies", Methods in Enzymology 328: 208-231 (2000).	

Examiner	Date	
Signature	Considered	

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	ВС	Ostermeier, et al., "Combinatorial protein engineering by incremental truncation," Proc Natl Acad Sci, 96(7):3562-3567 (March 1999).	
	BD	Ostermeier, et al., "Finding Cinderella's slipper proteins that fit," Nature Biotechnology, 17:639-640 (July, 1999).	
	BE	Ostermeier, et al., "A combinatorial approach to hybrid enzymes independent of DNA homology," Nature Biotechnology, 17(12):1205-1209 (December 1999).	
	BF	Pelletier, et al., "Oligomerization domain-directed reassembly of active dihydrofolate reductase from rationally designed fragments," Proc Natl Acad Sci , 95:12141-12146 (October 1998).	
	BG	Pelletier, et al., "A protein complementation assay for detection of protein-protein interactions in vivo," Protein Engineering, 10:89 (1997).	
	ВН	Pelletier, et al., "An in vivo library-versus-library selection of optimized protein-protein interactions", Nature Biotechnology 17: 683-689 (1999).	
	ВІ	Pieper, et al., "Circularly permuted β-lactamase from Staphylococcus aureus PC1," Biochemistry, 36(29):8767-8774 (1997).	
	BJ	Remy et al., "Erythropoietin Receptor Activation by a Ligand-Induced Conformation Change", Science 283: 990-993 (1999).	
	вк	Remy et al. "Visualization of biochemical networks in living cells", Proc. Natl. Acad. Sci. USA 98:14: 7678-7683 (2001).	
	BL	Remy et al. "Clonal selection and in vivo quantitation of protein interactions with protein-fragment complementation assays", Proc. Natl. Acad. Sci. USA 96: 5394-5399 (1999).	
	ВМ	Rossi, et al., "Monitoring protein-protein interactions in intact eukaryotic cells by β-galactosidase complementation," <u>Proc Natl Acad Sci</u> , 94:8405-8410 (August 1997).	
	BN	Subramaniam et al., "Direct visualization of protein interactions in plant cells", Nature Biotechnology 19: 769-772 (2001).	
	во	Vojtek, et al., "Mammalian Ras Interacts Directly with the Serine/Threonine Kinase Raf", Cell, 74:205-214 (1993).	
	BP	Xu, et al., "Cells that register logical relationships among proteins," Proc Natl Acad Sci, 94:12473 (November 1997).	
Examiner			_

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Page	6	of	6	Attorney Docket Number	021167-000750US

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	BQ	Zervos, et al., "Mxi1, a Protein That Specifically Interacts with Max to Bind Myc-Max Recognition Sites", Cell, 72:223-232 (1993).	

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